CIVIL TECH LABS

Accredited by NABL as per ISO/ IEC 17025 : 2005

5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027

Ph: 080 - 4114 2867 / Mob. : 96862 31801, Email: civiltechlabs@gmail.com

T-2654

To,

Assistant Executive Engineer,
Vidyaranyapura Sub Division,
BBMP.

17th October 2016

Dear Sir,

Sub: Testing of Materials.

As requested, tests on physical properties were carried out for the Materials supplied by you, for the work of **'Improvements to Roads and Drains at Byrappa Garden in Ward No. 10 (Doddabommasandra), Vidyaranyapura Sub Division.'**

Please find the enclosed Test Reports of the above.

Thanking You,
For Civil Tech Labs

Roopa. G

(ROOPA G.)
Technical Manager

AEE (VRP) SD

Jadha
AE

CIVIL TECH LABS

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TEST REPORT

GRADATION TEST ON FINE AGGREGATES

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Byrappa Garden in Ward No. 10 (Doddabommasandra), Vidyaranyapura Sub Division.
Name of Agency	M/s. K. R. I. D. L.
Date of Testing	17/10/2016
Specific Gravity	**2.56**
Technical Reference	IS : 2386(Part I)–1963 (Reaffirmed 2011), IS : 2386 (Part III)–1963 (Reaffirmed 2011)

Sample	IS Sieve designation (mm)	Sieve Analysis (% Passing IS Sieve)	Grading Requirement as per IS:383-1970 (Reaffirmed 2011)				Grading Zone	Remarks
			ZONE-I	ZONE-II	ZONE-III	ZONE-IV		
River Sand	10	**100**	100	100	100	100	II	Satisfies the requirement
	4.75	**98.6**	90-100	90-100	90-100	95-100		
	2.36	**87.4**	60-95	75-100	85-100	95-100		
	1.18	**75.2**	30-70	55-90	75-100	90-100		
	0.6	**48.4**	15-34	35-59	60-79	80-100		
	0.3	**25.9**	5-20	8-30	12-40	15-50		
	0.15	**7.9**	0-10	0-10	0-10	0-15		

Note:

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3. Any correction invalidates this report.
4. The results are based on the test conducted on samples supplied by the customer.

Roopa G

CIVIL TECH LABS BANGALORE

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Technical Manager

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TEST REPORT

TEST ON CEMENT

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Byrappa Garden in Ward No. 10 (Doddabommasandra), Vidyaranyapura Sub Division.
Name of the Agency	M/s. K. R. I. D. L.
Date of Testing	17/10/2016

Tests	**Test Method As Per IS & Apparatus**		**Results**		**Requirements As Per IS 8112:1989**	**Remarks**
	IS Code	**Method**	**Value**	**Unit**		
Initial Setting Time	**IS-4031 (Part-5) 1988**	VICAT	49	min	Not Less Than 30 Minutes	Satisfies Requirement
Final Setting Time	**IS-4031 (Part-5) 1988**	VICAT	489	min	Not More Than 600 Minutes	Satisfies Requirement
Soundness	**IS-4031 (Part-3) 1988**	LE-CHATELIER	4	mm	Not More Than 10 mm	Satisfies Requirement

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Roopa G.

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Technical Manager

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TEST REPORT

GRADATION TEST ON COARSE AGGREGATES 40mm ↓ Graded

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Byrappa Garden in Ward No. 10 (Doddabommasandra), Vidyaranyapura Sub Division.
Name of Agency	M/s. K. R. I. D. L.
Date of Testing	17/10/2016
Specific Gravity	**2.66**
Water Absorption	**0.28%**
Technical Reference	IS : 2386(Part I)–1963 (Reaffirmed 2011), IS : 2386 (Part III)–1963 (Reaffirmed 2011)

IS Sieve Designation (mm)	Sieve Analysis (% Passing IS Sieve)	Grading Requirement as per IS:383-1970 (Reaffirmed 2011)	Remarks
80	**100**	100	**Satisfies the requirement**
40	**99.2**	95-100	
20	**54.1**	30-70	
10	**25.3**	10-35	
4.75	**3.3**	0-5	

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T-2654

To,

Assistant Executive Engineer,
Vidyaranyapura Sub Division,
BBMP.

18th November 2016

Dear Sir,

Sub: Improvements to Roads and Drains at Byrappa Garden in Ward No. 10 (Doddabommasandra), Vidyaranyapura Sub Division.
Testing of cubes – Reg.

As requested the 28th day Compressive Strength Test of Cubes was carried out for the above work for the samples supplied by you.

Please find the enclosed Test Reports of the above.

Thanking you,

For Civil Tech Labs,

Roopa.G

CIVIL TECH LABS BANGALORE

(ROOPA G.)
Technical Manager

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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Byrappa Garden in Ward No. 10 (Doddabommasandra), Vidyaranyapura Sub Division.
Name of Agency	M/s. K. R. I. D. L.
Grade of Concrete	M-20
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm^2)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm^2)	Avg Compressive Strength (N/mm^2)
1	Sample-4	150.04 X 150.03 X 150.0	22511	21/10/2016	18/11/2016	28	8.22	505	**22.44**	**21.93**
2		150.05 X 150.04 X 150.0	22514				8.19	490	**21.78**	
3		150.04 X 150.06 X 150.0	22515				8.21	485	**21.56**	

Note:

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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Byrappa Garden in Ward No. 10 (Doddabommasandra), Vidyaranyapura Sub Division.
Name of Agency	M/s. K. R. I. D. L.
Grade of Concrete	M-20
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm^2)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm^2)	Avg Compressive Strength (N/mm^2)
1	Sample-3	150.06 X 150.08 X 150.0	22521	21/10/2016	18/11/2016	28	8.22	500	**22.22**	**22.00**
2		150.07 X 150.06 X 150.0	22520				8.20	490	**21.78**	
3		150.05 X 150.04 X 150.0	22514				8.19	495	**22.00**	

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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Byrappa Garden in Ward No. 10 (Doddabommasandra), Vidyaranyapura Sub Division.
Name of Agency	M/s. K. R. I. D. L.
Grade of Concrete	M-20
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm^2)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm^2)	Avg Compressive Strength (N/mm^2)
1	Sample-2	150.09 X 150.07 X 150.0	22524	21/10/2016	18/11/2016	28	8.20	495	**22.00**	**21.63**
2		150.04 X 150.03 X 150.0	22511				8.19	485	**21.56**	
3		150.06 X 150.05 X 150.0	22517				8.18	480	**21.33**	

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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Byrappa Garden in Ward No. 10 (Doddabommasandra), Vidyaranyapura Sub Division.
Name of Agency	M/s. K. R. I. D. L.
Grade of Concrete	M-20
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm^2)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm^2)	Avg Compressive Strength (N/mm^2)
1	Sample-1	150.06 X 150.04 X 150.0	22515	21/10/2016	18/11/2016	28	8.22	500	**22.22**	**21.93**
2		150.09 X 150.05 X 150.0	22521				8.19	485	**21.56**	
3		150.08 X 150.07 X 150.0	22523				8.21	495	**22.00**	

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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Byrappa Garden in Ward No. 10 (Doddabommasandra), Vidyaranyapura Sub Division.
Name of Agency	M/s. K. R. I. D. L.
Grade of Concrete	M-15
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm^2)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm^2)	Avg Compressive Strength (N/mm^2)
1	CC-Work	150.02 X 150.01 X 150.0	22505	20/10/2016	17/11/2016	28	8.20	360	**16.00**	**15.88**
2		150.05 X 150.03 X 150.0	22512				8.21	358	**15.91**	
3		150.04 X 150.06 X 150.0	22515				8.19	354	**15.73**	

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